SENN Impression Material (GC America, Inc.) Project 06-06) (12/06)

SENN is a new hybrid polyether-polysiloxane impression material that is marketed by GC America. SENN reportedly combines the benefits of polyether and vinyl polysiloxane impression materials. The pleasant-tasting hybrid impression material purportedly has hydrophilic properties, high tear strength, excellent dimensional accuracy and resistance to deformation. SENN is available in two setting times (fast and regular) and four viscosities (putty, heavy body, monophase, and light body).

Manufacturer:
GC America, Inc.
3737 West 127th Street
Alsip, IL 60803
(800) 323-7063
(708) 597-0900
(800) 423-2963 FAX
www.gcamerica.com

Suggested Retail Price:

$39.75	SENN Two-Cartridge Package with Mixing Tips and Instructions

Item #	**Available Viscosities:**
136911	Two 48 mL cartridges (96 mL total) SENN Light Body/8 mixing tips
136912	Two 48 mL cartridges (96 mL total) SENN Monophase/6 mixing tips
136913	Two 48 mL cartridges (96 mL total) SENN Heavy Body/6 mixing tips
136914	Two 48 mL cartridges (96 mL total) SENN FAST Light Body/8 mixing tips
136915	Two 48 mL cartridges (96 mL total) SENN FAST Monophase/6 mixing tips
136916	Two 48 mL cartridges (96 mL total) SENN FAST Heavy Body/6 mixing tips

Government Price:

$22.70	SENN Two-Cartridge Package with Mixing Tips and Instructions (item numbers and contents as above)

ADVANTAGES:

+ Meets ANSI/ADA specifications for detail reproduction
+ Heavy body tray material meets ANSI/ADA detail reproduction specifications as light body wash material
+ Meets ANSI/ADA specifications for linear dimensional stability
+ Acceptable working and setting times
+ Acceptable contact angles suggested adequate hydrophilicity
+ Acceptable odor and taste
+ Viscosity of different materials adequate for intended clinical purpose
+ Easy to remove from the oral environment
+ Good packaging configuration
+ Easy-to-read manufacturer instructions containing adequate technical detail

DISADVANTAGES:

- Incomplete material mixing with light-body and monophase viscosities that appears to be random in nature
- Possible loss of detail reproduction within incompletely mixed material

SUMMARY AND CONCLUSIONS:

SENN represents a new class of dental impression material in which it represents a hybrid of a polyether and a polyvinyl siloxane elastomeric impression material. During this evaluation, all three SENN viscosities (light body, monophase, and heavy body) provided excellent detail reproduction and the heavy body tray material met the same ANSI/ADA standards for the light-body material. SENN materials met ANSI/ADA standards for linear dimensional stability, had acceptable working and setting times, and demonstrated hydrophilicity (via contact angle measurement) that was in the same range reported for other elastomeric impression materials in the scientific literature. The clinical users liked the packaging configuration and thought that the manufacturer instructions were easy to read and contained adequate technical detail. The evaluators reported that none of their patients objected to SENN's taste or odor, that the material was easy to remove from the oral environment and the viscosity of each material was adequate for its intended clinical purpose. However, none of the clinical users would recommend the purchase of SENN as it provided, in their opinion, no obvious advantage over materials that they were familiar with. The most glaring shortcoming noted with SENN is that the light body and the monophase materials were plagued with random but frequent occurrences of incomplete mixing during the laboratory evaluation; and this phenomenon may have been the cause of a documented clinical case during the clinical evaluation in which appreciable amounts of SENN impression material was retained in the gingival sulcus. Until the deficiencies involving the incomplete mixing are resolved by the manufacturer, **SENN** is rated **Marginal** for use in US Air Force dental facilities.